



US010527611B2

(12) **United States Patent**
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(10) **Patent No.:** **US 10,527,611 B2**
(45) **Date of Patent:** **Jan. 7, 2020**

(54) **DEVICES AND METHODS OF CELL
CAPTURE AND ANALYSIS**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 304 days.

(21) Appl. No.: **14/812,498**

(22) Filed: **Jul. 29, 2015**

(65) **Prior Publication Data**

US 2016/0025720 A1 Jan. 28, 2016

Related U.S. Application Data

(62) Division of application No. 12/730,738, filed on Mar.
24, 2010, now Pat. No. 9,128,082.

(Continued)

(51) **Int. Cl.**

G01N 33/536 (2006.01)

G01N 33/543 (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC **G01N 33/54306** (2013.01); **G01N 33/536**
(2013.01); **G01N 33/56966** (2013.01); **G01N**
33/56972 (2013.01); **G01N 33/57492**
(2013.01)

(58) **Field of Classification Search**

CPC **G01N 33/54306**; **G01N 33/536**; **G01N**
33/56966; **G01N 33/57492**

See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides a device for isolating target
biomolecules or cells from samples, particularly biological
samples. In particular, the device comprises a loading mix-
ture, which contains the biological sample and a first binding
entity that specifically binds to the target biomolecule or
target cell; and a micro-channel coated with a second
binding entity that binds directly or indirectly to the first
binding entity. Methods of capturing, detecting, and/or
evaluating target biomolecules or target cells (e.g. cancer
cells) in biological samples are also disclosed.

12 Claims, 18 Drawing Sheets

Cells Pre-labeled with Ab Prior to Enrichment on
Streptavidin Channel

